

## Equipment Energy Measurement Plan (example)

<b>Equipment Energy Measurement Plan</b>	
<b>Key Characteristic(s):</b> Significant energy use Related variable EnPI	<b>Location:</b> Administration Building 130
<b>System/Process/Equipment:</b> Roof – top HVAC	
<b>Data Collected:</b> Unit amperage, outside temperature, total air flow, evaporator coil temperature difference	
<b>Monitoring/Measurement Method:</b> Unit amperage – Unit power meter Outside temperature – ACME digital thermometer Total air flow – ACME velometer Evaporator coil temperature difference – ACME digital thermometer	
<b>Data Collection Frequency:</b> Unit amperage, total air flow, Evaporator coil temperature difference – Every Monday Outside temperature - Daily	
<b>Data Collection Responsibility:</b> Production Engineer	
<b>Calibration Requirements:</b> Unit power meter, ACME digital thermometers and velometer – Semiannual by equipment manufacturer - Contact maintenance	
<b>Describe the links to energy management action plans, operational controls, training and design activities:</b> No current action plan links New employees will require training in monitoring and measuring requirements Design changes will require evaluation of monitoring and measuring requirements Data used to verify control settings and indicate filter clogs and fan blade buildup	
<b>Where is data recorded?</b>	

Production engineer process records	
<b>How will data be analyzed?</b>	
Initial review during data collection for major anomalies; Monthly data plotting to monitor performance trends and indicate potential problems; Calculate coefficient of performance (COP)	
<b>What defines a significant deviation?</b>	
Amperage: +/- 10% of rating	
Air flow: Upper limit 4,400 SCFM, Lower limit – 3,500 SCFM	
Motor amperage: COP - +/- 10%	
<b>How does this demonstrate/affect energy performance?</b>	
Change in these parameters can indicate clogged filters, low refrigerant, dirty fans, compressor problems or line leaks.	
<b>Date:</b> 06/17/201X	<b>Approved:</b> <i>Samuel Jennings</i>